

## REMARKS

Applicant submits this Reply in response to the final Office Action mailed July 15, 2010. Prior to this Reply, claims 21-40 were pending, of which claims 21 and 37 are independent.

In the final Office Action, the Examiner rejected claims 21-28, 32, and 37-40 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,522,888 ("Garceran") in view of U.S. Patent Publication No. 2007/0135134 ("Patrick"); rejected claims 29-31 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Garceran in view of Patrick and further in view of U.S. Patent Publication No. 20040156372 ("Hussa"), and rejected claims 33-36 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Garceran in view of Patrick and further in view of U.S. Patent Publication No. 20030125046 ("Riley").

With this Reply, Applicant has amended claims 21, 22, 26, 27, and 33-37. No new matter has been added. Applicant has also canceled claims 28, 30, and 39 without prejudice or disclaimer of their subject matter. Therefore, after this Reply, claims 21-27, 29, 31-38, and 40 are currently pending, of which claims 21 and 37 are independent.

Applicant respectfully traverses all pending rejections at least based on the enclosed amendments and the reasons discussed below.

### Rejection of Claims 21-28, 32, and 37-40 Under 35 U.S.C. § 103(a)

Applicant respectfully traverses the rejection of claims 21-28, 32, and 37-40 under 35 U.S.C. § 103(a) as being unpatentable over Garceran in view of Patrick.

Claims 28 and 39 have been canceled, rendering moot their rejection. Claims 21 and 37 are the independent claims in this rejection statement.

As explained in Applicant's specification, the present application in its exemplary embodiments addresses improvements in estimating the position of terminals within a local wireless telecommunications network, such as laptops operating according to IEEE 802.11 protocols in a wireless LAN. See, e.g., Spec. at 1-2. Exemplary embodiments in the specification define a set of configuration data comprising a plurality of configuration data base entries relating to a configuration of the network and defining a set of measuring data depending on the type of terminal. *Id.* at 7-8. Different combinations of the set of configuration data and the set of measuring data are associated with respective locating procedures and corresponding to accuracy values. The exemplary embodiments of the specification permit selectively actuating at least one locating procedure by taking into account a weight index, indicative of the difficulty in providing configuration information, and the accuracy values. *Id.* at 14. Accordingly, the disclosed embodiments provide a flexible solution for locating terminals within a local wireless network that can be adapted based on the combinations of information present within the network. *Id.* at 8.

Independent claim 21, as amended, is directed to similar subject matter and calls for a method including, for example,

associating each of a plurality of locating procedures with a different combination of at least one of the plurality of configuration data base entries and at least one of the plurality of measuring data types, wherein each of the plurality of locating procedures is configured to estimate a position of the terminal based on the associated combination and corresponds to an accuracy value of the estimated position, each of

said plurality of locating procedures having associated a respective weight index in terms of difficulty in providing said configuration data; and

selectively actuating at least one of the plurality of locating procedures obtained from said associating step to provide the location estimation by taking into account said weight index and said accuracy value.

Amended independent claim 37, while of different scope than amended independent claim 21, contains similar recitations.

Independent claims 21 and 37, as amended, are patentably distinguishable from the cited references at least in that they recite “each of said plurality of locating procedures having associated a respective weight index in terms of difficulty in providing said configuration data” and “selectively actuating at least one of the plurality of locating procedures obtained from said associating step to provide the location estimation by taking into account said weight index and said accuracy value.” As explained in Applicant’s specification, a weight index in disclosed embodiments can be computed through a weight function that estimates the weight (or cost) associated with each network configuration in terms of factors such as the difficulty in finding network configuration information. Spec. at 14. As claimed, the method takes “into account said weight index and said accuracy value” in selectively actuating a locating procedure.

Garceran and Patrick, either taken alone or combined together, do not disclose or render obvious the use of a weight index, as claimed.

Garceran generally discloses “a system for determining [radio frequency (“RF”)] coverage in a wireless communications systems using location information for [a] wireless unit.” Garceran, col. 3, ll. 5-6. Garceran further discloses that

While a wireless unit is communicating with a base station, the RF coverage system can dynamically determine RF coverage using the location information from the wireless unit in association with additional information and/or measurements, such as signal quality measurements which can include received signal strength (RSSI), bit error rate (BER), and/or frame error rate (FER), made at the wireless unit and/or at the receiving base station(s), and/or other information or parameters, such as operating conditions, mobile identity, traffic load, frequency, speed, direction, time and/or mobile/type.

*Id.* at col. 3, ll. 15-25. More specifically, Garceran discloses that “using the location of the wireless unit and collecting associated or corresponding data for the wireless unit at that location, the wireless communication system 50 can produce an RF database . . . to represent or provide an RF coverage map for a geographic region.” *Id.* at col. 3, ll. 26-30. “The location information and/or associated information [is] transmitted to the serving base station from the wireless unit.” *Id.* at col. 4, ll. 1-2. Nowhere does Garceran describe the use of a weight index, as recited in amended independent claims 21 and 37.

Patrick does not cure these deficiencies of Garceran. The final Office Action cites Patrick for teaching “that the locating system . . . is located remotely from the terminal . . . and the plurality of base stations.” Final Office Action, p. 5 (internal citations omitted). Even assuming the final Office Action’s characterizations of Patrick are correct, which Applicant does not concede, Patrick still does not teach or suggest the above-referenced elements of amended independent claims 21 and 37.

The amendments to claims 21 and 37 further separate the claimed subject matter from Garceran and Patrick in that they specify that the “local wireless telecommunications network” includes a plurality of “access points.” Applicant’s specification explains that a “local wireless telecommunications network” refers to

“networks optimized by geographic areas with limited sizes, such as individual palaces for offices, warehouses or set of buildings and owned used and managed, in general, by a single organization.” Spec. at 1. The term also covers “networks for very limited areas as regards sizes, such as, for example, small offices, individual laboratories and home environments.” *Id.* This explanation, together with the recitation of “access points,” should clarify the context of the claimed subject matter, for example, as being within a wireless LAN such as one operating under IEEE 802.11 protocols. See *id.*

In contrast, Garceran and Patrick are directed to a cellular telephone network operating across a large geographic area using RF signals. Contrary to a cellular telephone network, a “local wireless telecommunications network” does not have a predefined and rigid network configuration. Its network configuration can vary in time. Therefore, Garceran and Patrick do not confront the same issues as the present invention and understandably do not disclose or render obvious the flexibility of using configuration information of the local network available at a specific instant in time and with the maximum possible degree of accuracy at specific instant in time for actuating a location procedure. In short, the references do not render obvious “each of said plurality of locating procedures having associated a respective weight index in terms of difficulty in providing said configuration data” and “selectively actuating at least one of the plurality of locating procedures obtained from said associating step to provide the location estimation by taking into account said weight index and said accuracy value.”

As set forth above, neither Garceran nor Patrick teach or suggest every feature of Applicant’s amended independent claims 21 and 37. Consequently, the final Office Action has not properly ascertained the differences between the references and the

rejected claims. Accordingly, no reason has been articulated as to why the claims would have been obvious to one of ordinary skill in the art. For at least this reason, claims 21 and 37, as amended, should be allowable. Pending claims 22-27, 32, 38, and 40 depend from one of allowable independent claims 21 and 37 and should be allowable at least due to their dependence from these base claims. Therefore, for at least the foregoing reasons, Applicant respectfully requests withdrawal of the Section 103 rejection of pending claims 21-28, 32, and 37-40.

**Rejection of Claims 29-31 and 33-36 Under 35 U.S.C. § 103(a)**

Applicant respectfully traverses the rejection of claims 29-31 under 35 U.S.C. § 103(a) as being unpatentable over Garceran in view of Patrick and further in view of Hussa and the rejection of claims 33-36 under 35 U.S.C. § 103(a) as being unpatentable over Garceran in view of Patrick and further in view of Riley. Of these claims, claim 30 has been canceled, rendering moot its rejection. Each of the remaining claims depends, either directly or indirectly, from independent claims 21 or 37. Moreover, the final Office Action's application of Hussa and Riley fails to cure the above-noted deficiencies of Garceran and Patrick. For Hussa, the final Office Action alleges that

Hussa teaches transferring, to the terminal of the network (mobile based positioning), . . . , processing programs for performing at least one subset of locating procedures . . . , and at least one subset of said plurality of configuration data base entries (base station coordinates) used by the transferred locating procedures . . . , whereby the location estimation is performed by the terminal and information about estimated position and estimation accuracy are transmitted from the terminal to a locating system upon every service request.

Office Action, p. 9 (internal citations omitted). The final Office Action further alleges that “Hussa teaches the terminal performing signal measurement and calculates the location estimation.” *Id.* at 10. Regarding Riley, the final Office Action alleges that “Riley teaches estimates [sic] the position of the terminal corresponding to the barycenter (centroid) coordinates of the coverage area of said base station and an uncertainty value, the uncertainty value being defined by the distances from said barycenter to all points of the coverage area.” *Id.* at 12 (internal citations omitted). Even assuming that the final Office Action’s characterizations of Hussa and Riley are correct, which Applicant does not concede, neither Hussa nor Riley teach or suggest the above-referenced elements of amended independent claim 21 or 37 and as required by each of dependent claims 29, 31 and 33-36. Accordingly, the cited references, taken either alone or in any reasonable combination, fail to teach or suggest all the recitations of claims 29, 31 and 33-36, and the rejections should be withdrawn.

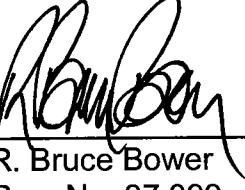
In view of the foregoing remarks, Applicant submits that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicant therefore requests the Examiner’s reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge  
any additional required fees to Deposit Account 06-0916.

Respectfully submitted,

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Dated: November 10, 2010

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